

REMARKS

The present Amendment amends claims 3, 5 and 7 and leaves claims 1, 2, 4, 6 and 8-15 unchanged. Therefore, the present application has pending claims 1-15.

Claim 5 stands objected to due an informality noted by the Examiner in paragraph 4 of the Office Action. An amendment was made to claim 5 to make it depend from claim 4. Therefore, this objection is overcome and should be withdrawn.

In paragraph 4 of the Office Action, the Examiner indicated that claims 3-8 would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims. Amendments were made to claims 3-8 to place them in independent form including all the limitations of the base claim and any intervening claims. Therefore, claims 3-8 are allowable as indicated by the Examiner.

Applicants acknowledge the Examiner's indication in paragraph 7 of the Office Action that claims 9-15 are allowable over the prior art of record.

Claims 1 and 2 stand rejected under 35 USC §102(b) as being anticipated by Nakai (U.S. Patent No. 5,297,029). This rejection is traversed for the following reasons. Applicants submit that the features of the present invention as recited in claims 1 and 2 are not taught or suggested by Nakai whether taken individually or in combination with any of the other references of record. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

Claims 1 and 2 are directed to a nonvolatile memory apparatus which has terminals including a clock terminal, a command terminal and another terminal.

According to the present invention as clearly recited in the claims the clock terminal receives a clock signal from outside of the apparatus, the command terminal receives commands which are stored in the second buffer and the other terminal is used to perform the input and output of data to or from the apparatus. Thus, the other terminal is sued to perform the input and output of data which is specifically recited in the claims as not being conducted on the command terminal or the clock terminal.

Therefore, according to the present invention, the nonvolatile memory apparatus has unique advantages being that when a read operation is specified, the apparatus reads data from the memory array, stores the read data into the first buffer and outputs the read data via the other terminal without use of the command terminal in response to a clock signal and when a program operation is specified, the apparatus receives data via the other terminal without use of the command terminal in response to the clock signal, stores the data into the first data and stores the data from the first buffer into the memory array.

The above described features of the present invention now more clearly recited in the claims are not taught or suggested by any of the references of record whether taken individually or in combination with each other. Particularly, these features as now more clearly recited in the claims are not taught or suggested by Nakai.

Nakai discloses, for example, in Figs. 12 and 26 a nonvolatile memory apparatus having a clock terminal (NRE), control terminals (CLE, ALE, NWP, NCE, NWE, NRE etc.), and I/O terminals. However, Nakai specifically teaches that the I/O

terminals receives the command, address and data as, for example, illustrated in Figs. 12 and 26. Thus, when the nonvolatile memory apparatus taught by Nakai receives a command, the command is stored in the command register in response to the control terminal NRE being related. The Examiner's attention is directed to col. 2, lines 59-64. The data is received on the very same I/O terminals as taught by Nakai. Thus, at no point is there any teaching in Nakai that the command and data are submitted on separate terminals as in the present invention. In Nakai, both command and data are input on the I/O terminals and as such if a command exists on the I/O terminals, the command is stored in the command register and if data exists on the I/O terminals then the data is stored in the data register.

Thus, Nakai clearly teaches that both command and data are received via the same terminals (I/O terminals) contrary to expressed limitations as recited in the claims. Therefore, the features of the present invention as recited in the claims are not taught or suggested by Nakai whether taken individually or in combination with any of the other references of record.

Therefore, Nakai fails to teach or suggest a nonvolatile memory apparatus having a plurality of terminals including a clock terminal, a command terminal and another terminal wherein when a read command is received from the command terminal, the nonvolatile memory apparatus reads data from ones of the nonvolatile memory cells, stores read data to the first buffer, outputs the read data stored in the first buffer to outside of the nonvolatile memory apparatus via the other terminal not the command terminal in response to the clock as recited in the claims.

Further, Nakai fails to teach or suggest that when a program command has been received, the nonvolatile memory apparatus receives data from outside of the nonvolatile memory apparatus via the other terminal not the command in response to the clock signal, stores received data to the first buffer and writes the received stored in the first buffer to ones of the nonvolatile memory cells as recited in the claims.

As is quite clear from the above, the features of the present invention as now more clearly recited in the claims are not taught or suggested by Nakai whether taken individually or in combination with any of the other references of record. Accordingly, reconsideration and withdrawal of the 35 USC §102(b) rejection of claims 1 and 2 as being anticipated by Nakai is respectfully requested.

The remaining references of record have been studied. Applicants submit that they do not supply any of the deficiencies noted above with respect to the reference utilized in the rejection of claims 1 and 2.

In view of the foregoing amendments and remarks, applicants submit that claims 1-15 are in condition for allowance. Accordingly, early allowance of claims 1-15 is respectfully requested.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of MATTINGLY, STANGER & MALUR, P.C., Deposit Account No. 50-1417 (501.35478CX22).

Respectfully submitted,

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